# **REMARKS**

### SUMMARY:

The present application sets forth claims 11-13, 15, 17, 19-25, 56-57 and 59-66, of which claims 11 and 60 are independent claims.

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected as being allegedly directed to non-statutory subject matter under 35 U.S.C. § 101. Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over "Financial Aid Prospecting – ONLINE: The Internet is Loaded with Valuable Financial Aid Information, but Few Campus Web Sites Are Designed to Help Them Find It," Terrell, Kenneth, Black Issues in Higher Education, Reston: Oct. 28, 1999, Vol. 16, Iss. 18, pg. 38 (hereinafter "Terrell") in view of U.S. Patent No. 7,062,462 (Ireland et al.) and further in view of U.S. Patent No. 5,870,721 (Norris) and further in view of Applicant's Admitted Prior Art (AAPA).

Based on the following remarks and because the USPTO has failed to meet its burden of establishing a prima facie case of unpatentability, Applicant respectfully traverses each of the above rejections and requests reconsideration and allowance of all pending claims.

#### 35 U.S.C. § 101 REJECTION (CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66):

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 are apparently rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter. Applicant respectfully traverses such rejection for a variety of reasons as set forth below. Before discussing

the patentability of such claims, the basis for rejection set forth in the recent Office Action and the applicable law relative to § 101 analysis are discussed.

#### OFFICE ACTION REJECTION AND APPLICABLE LAW RE 35 U.S.C. § 101:

The burden is on the USPTO to set forth on the record a prima facie case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). To properly reject a claimed invention under 35 U.S.C. 101, the Office must (A) make a prima facie showing that the claimed invention lacks utility, and (B) provide a sufficient evidentiary basis for factual assumptions relied upon in establishing the prima facie showing. *In re Gaubert*, 524 F.2d 1222, 1224, 187 USPQ 664, 666 (CCPA 1975) ("Accordingly, the PTO must do more than merely question operability - it must set forth factual reasons which would lead one skilled in the art to question the objective truth of the statement of operability"). See also MPEP §§ 2106 and 2107.02.

The prima facie showing must be set forth in a well-reasoned statement. Any rejection based on lack of utility should include a detailed explanation why the claimed invention has no specific and substantial credible utility. Whenever possible, the examiner should provide documentary evidence regardless of publication date (e.g., scientific or technical journals, excerpts from treatises or books, or U.S. or foreign patents) to support the factual basis for the prima facie showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically explain the scientific basis for his or her factual conclusions.

Where the asserted utility is not specific or substantial, a prima facie showing must establish that it is more likely than not that a person of ordinary skill in the art would not consider that any utility asserted by the applicant would be specific and substantial. The prima facie showing must contain the following elements:

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- (A) An explanation that clearly sets forth the reasoning used in concluding that the asserted utility for the claimed invention is neither both specific and substantial nor well-established;
  - (B) Support for factual findings relied upon in reaching this conclusion; and
- (C) An evaluation of all relevant evidence of record, including utilities taught in the closest prior art.

The November 10, 2009 Office Action fails to articulate an understandable explanation for why claims 11-13, 15, 17, 19-25, 56-57 and 59-66 are unpatentable under 35 U.S.C. § 101. The Office Action is completely devoid of any factual findings, documentary evidence, or well-reasoned statements to support a prima facie case of lack of utility. The exact basis for rejecting the pending claims under 35 U.S.C. § 101 is wholly inconsistent and largely ambiguous at best. Numbered pages 2-3 of the recent Office Action first states that the "[p]atent statute does not allow patents to be issued on particular business systems and methods that depend for their operation on human intelligence alone." Then, the Office Action states that the claimed invention does not fall into one of the four statutory categories because it is a computer per se. Then, the Office Action states that the claims at issue "does not use of machine and does not describe process of manufacture or process for alteration of composition of matter [sic]." The Office Action then lists a citation for *In re Comiskey*, 84 U.S.P.Q.2d 1670 (Fed. Cir. 2007) and In re KSR (without citation). Applicant is unclear whether there is one rationale or many different reasons under § 101 analysis upon which the Examiner is relying to reject claims 11-13, 15, 17, 19-25, 56-57 and 59-66.

The recent Office Action is inconsistent and ambiguous because of its statements regarding patentability of business systems and methods. In particular, there is no per se exclusion on the patentability of "business systems and methods" as implied in the Office Action. *In re Bilski* recently affirmed a rejection of categorical

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exclusions beyond those for fundamental principles already identified by the Supreme Court. In particular, the *In re Bilski* opinion stated that a so-called "business method" exclusion was unlawful and that business method claims are subject to the same legal requirements for patentability as applied to any other process or method. *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc).

The recent Office Action is further inconsistent and ambiguous because of its statements regarding patentability of computers. There is no per se exclusion on the patentability of software or computers per se as implied in the Office Action. For the same reasons identified above, such a categorical exclusion is improper. In addition, courts have specifically concluded that computer useable medium and software claims are directed to statutory subject matter. See, e.g., *In re Lowry*, 32 F.3d 1579, 1582 (Fed. Cir. 1994); see also MPEP §§ 2106 and 2106.01.

A third reason for inconsistency in the recent Office Action and further proof that the USPTO has failed to establish a prima facie case of unpatentability involves the lack of any appropriate specific case law citations in support of the alleged arguments. On both pages 2 and 3, the Office Action cites *In re Comiskey*, 84 U.S.P.Q. 2d 1670 (Fed. Cir. 2007). However, Applicant respectfully notes that the *In re Comiskey* decision originally provided at 499 F.3d 1365, 84 U.S.P.Q.2d 1670 (Fed. Cir. 2007) has been vacated and the original opinion was withdrawn. As such, and unless the Examiner is relying on some sort of revised opinion, this particular case from 2007 is no longer good law. In addition, both pages 2 and 3 of the Office Action cite "In re KSR." This case law citation is unclear. Is this intended to reference the Supreme Court's decision in *KSR v. Teleflex*, 550 U.S. 398 (2007)? If so, Applicant is unclear what point of law is being relied upon because the *KSR* decision generally concerns the issue of obviousness under 35 U.S.C. § 103 as opposed to patentability under 35 U.S.C. § 101. None of the case law cited by the Examiner is appropriate, and thus it is not sufficient to provide a required explanation for unpatentability of the subject claims.

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Because of the inconsistencies and ambiguities in the recent Office Action, including improper suggestions regarding categorical exclusions of patentable subject matter and inappropriate case law citations, Applicant submits that the USPTO has failed to meet its burden of providing an explanation for establishing a prima facie case of unpatentability. If the Office cannot develop a proper prima facie case and provide evidentiary support for a rejection under 35 U.S.C. 101, a rejection on this ground should not be imposed. See, e.g., *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

# • PATENTABILITY OF CLAIMS 11-13, 15, 17, 19-25, 56-57 and 59-66 UNDER 35 U.S.C. § 101:

The only requirement under 35 U.S.C. § 101 appropriate to claims 11-13, 15, 17, 19-25, 56-57 and 59-66 is that the claims be directed to one of the four categories of patentable subject matter defined in the statute. To be patentable under 35 U.S.C. § 101, claims must be directed to one of the four statutorily defined categories of patentable subject matter — process, machine, manufacture or composition of matter. In addition, such claims cannot fall into one of the judicially recognized exceptions such as abstract ideas, mental processes, laws of nature and natural phenomena. As described below, claims 11-13, 15, 17, 19-25, 56-57 and 59-66 are directed to a software-based "machine" or "manufacture." They do not constitute mental processes as they explicitly depend on the use of a computer and various other electronic software-based features. As such, the pending claims clearly satisfy one of the four categories of patentable subject matter defined under 35 U.S.C. § 101.

Independent claims 11 and 60 are directed to tangible software-based systems, and are thus statutory under 35 U.S.C. § 101 as a product claim. In particular, claims 11 and 60 are directed to web-based applications for providing a multi-level financial aid system featuring integrated and automated on-line financial aid features specific to a

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given educational institution to a user. Such product claims include a variety of services selectively including an information collection service, a financial aid estimation service, a federal link service, a service for comparing information, a service for determining an authorized amount of financial aid, a service for providing an award notice, and a reporting service for generating reports. Such services are "web-based" and implemented in an "automated on-line" environment, thus explicitly requiring the use of computer-implemented software.

Courts have specifically concluded that computer useable medium and software claims are directed to statutory subject matter. See, e.g., *In re Lowry*, 32 F.3d 1579, 1582 (Fed. Cir. 1994); see also MPEP §§ 2106 and 2106.01. The web-based applications of claims 11 and 60 include tangible services that are embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involves sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application. Because software applications are understood to be stored in a computer-readable medium and implemented by a computer processor, claims 11 and 60 are tangible manufactures and directed to patentable subject matter under 35 U.S.C. § 101.

Since claims 11 and 60 are software-based product claims, they are directed to tangible machines and/or manufactures. In particular, an automated on-line web-based application that is implemented with software features is a tangible product, thus falling into one of the four statutorily defined categories of patentable subject matter under 35 U.S.C. § 101. As such, both independent claims 11 and 60 satisfy the requirements of 35 U.S.C. § 101, and Applicant respectfully requests acknowledgement of the same.

Independent claims 11 and 60 as well as their corresponding dependent claims clearly require the use of a computer or other electronic software-based features and thus cannot be considered a "mental process" or an invention that "depends on human intelligence alone." When evaluating whether a claim falls within one of the judicially

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recognized exceptions to the categories of patentable subject matter set forth in 35 U.S.C. § 101, the claim <u>as a whole</u> must be evaluated. The claim must be given its broadest reasonable interpretation and if any such interpretation is directed to a manmade tangible embodiment (i.e., structure) with a real world use, then the subject matter has been practically applied and cannot fall within a judicially recognized exception to patentability.

It is clear that the web-based applications set forth in claims 11 and 60 do NOT correspond to purely mental processes, since under their broadest reasonable interpretation they are product claims including tangible structure. Independent claims 11 and 60 are both directed to a "web-based application for providing a multi-level financial aid system featuring integrated and automated on-line financial aid features to a user." Claims 11 and 60 of the subject application describe the claimed invention in terms of both a system and application, both of which are structurally-described apparatus embodiments.

Not only are claims 11 and 60 system-based claims, but they clearly contemplate use of a computer. By describing the financial aid system in terms of a "web-based application", it should be clear that access to the web (which requires communication access via computer, phone or some other processing device with at least some communications and processing functionality) will be required. Further, the system and application are described as "automated," which is typically understood to mean that the system is implemented by mechanical or electronic devices as opposed to human labor, etc. As such, web-based automation according to claims 11 and 60 would reasonably require the use of electronic computing devices or the like. The system is still further described as an "on-line" system, again indicating that the system will be connected to, served by, or available through a computer or telecommunications system (such as the Internet). The web-based system applications of claims 11 and 60 have integrated and on-line financial aid features recited in terms of "services," which are similar to

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"modules" or other computer-based components. These services are embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involve sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application.

For the same reasons and more, as described above, claims 11 and 60 clearly require, under their broadest reasonable interpretation, the use of a computer for their implementation. Dependence on processor-based functionality precludes interpretation of such claims as depending for their operation on human intelligence alone. As such, claims 11 and 60 are directed to patentable subject matter under 35 U.S.C. § 101. Applicant respectfully requests withdrawal of this pending rejection.

# 35 U.S.C. § 112, SECOND PARAGRAPH REJECTION (CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66):

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 112, second paragraph, a being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, numbered page 4 of the Nov. 10, 2009 Office Action alleges the following:

"Claim 11 and Claim 60, beside being a descriptive material (computer per se), have missing steps for example, 'a service for comparing,' where is the result of such comparing and where is the result used? Similarly for other services with intended use "for" clauses, where the claims do not positively indicate the next step which uses the result of the service (do not claim any following functionality which uses the information). The claimed language has missing step which create gap in the process of the invention for concrete and tangible result [sic throughout]."

The above requirements for establishing a prima facie rejection do not end

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with analysis under § 101 (described above). In contrast, the requirements for establishing a prima facie case of unpatentability apply to all statutory provisions, including 35 U.S.C. § 112. As such, a proposed rejection under 35 U.S.C. § 112 should also be reviewed and its basis confirmed to ensure that an Examiner is able to set forth a prima facie case of unpatentability. Only then should a rejection be imposed in an Office Action. If imposed, the Office action should clearly communicate the findings, conclusions and reasons which support them.

The record relied upon in rejection the claims under 35 U.S.C. § 112 also fails to meet the required burden of establishing a prima facie case of unpatentability. Again, the Examiner's arguments are inconsistent with the current case law. Numbered page 4 discusses whether the invention has a "concrete and tangible" result, which relates more to the formerly applied and now inappropriate "useful, concrete and tangible result" test for patentability under 35 U.S.C. § 101 as opposed to 35 U.S.C. § 112. Recent case law set forth in *In re Bilski* establishes that the "useful, concrete and tangible result" previously applied under *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998) is inadequate, and should no longer be applied. As such, the USPTO has failed to meet its burden of establishing a prima facie case of unpatentability under 35 U.S.C. § 112.

Despite the failure of establishing a prima facie case, the following remarks support a position of claim clarity under 35 U.S.C. § 112, second paragraph. The specific portion of the second paragraph of 35 U.S.C. § 112 apparently relied on by the Examiner corresponds to the requirement that "the claim(s) particularly point out and distinctly claim the invention." According to MPEP §§ 2106 and 2171, "[a]n application fails to comply with ... [this] requirement when the claims do not set out and define the invention with a reasonable degree of precision and particularity. In this regard, the definiteness of the language must be analyzed, not in a vacuum, but always in light of

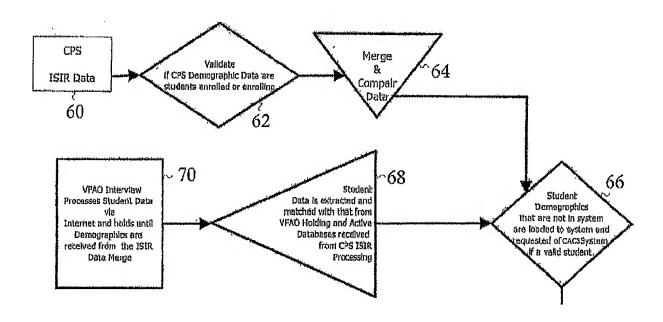
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the teachings of the disclosure as it would be interpreted by one of ordinary skill in the art.".

Based on the language explicitly provided in claim 11, and described in relevant part in the specification, one of ordinary skill in the art would clearly understand the interaction among the given system processing services set forth in such claim. For example, the financial aid estimation service of claim 11 is particularly described as evaluating the information obtained via the first information collection service to generate a predicted amount of monetary aid for a student. By reading the specification, one of skill in the art would understand that the financial aid estimation service is embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involves sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application. Thus, software that automatically implements the financial aid estimation service, takes input from the first information collection service, processes that data according to algorithmic rules also stored in software, and generates an estimation of available financial aid specific to a student and the given educational institution he/she is attending or planning to attend.

The "service for comparing" feature of claim 11 clearly indicates that the compared information corresponds to the "information obtained via said first information collection service and the given student's ISIR document [obtained via the federal link service]." When viewing this service, not in a vacuum but in light of the specification, exemplary aspects of such a comparison are revealed. For example, Figure 5 (a relevant portion of which is shown below) shows how automated processing effected via the comparing service of claim 11 merges and compares the student information and related ISIR data.

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Part of Figure 5 of the Subject Application (USSN 10/054,689 (Weber)

As more particularly described in paragraph [0068] of the specification, VFAO system 10 preferably receives student interview data via the Internet at step 70, and then sends that data to either a holding database or an active database until additional demographic information is received. This additional information is typically in the form of an ISIR, and when received, all information is merged. In step 68, any data that is received from CPS ISIR processing is then matched with data extracted from active and holding databases in the VFAO application. CPS and ISIR data 60 is then validated in step 62 depending on whether a student is enrolled or is enrolling at that educational institution. Step 64 merges and ensures correct comparison of this validated ISIR information with a student's interview information, and student information is then stored in an active status database.

The above-described "service for comparing" leads right into the subsequently described "service for determining an authorized amount of financial aid" because

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official authorized financial aid determinations must inherently depend on the accuracy of student information, which is compared (i.e., for validation purposes) in the prior "service for comparing." As particularly described in paragraph [0041] of the original specification, "once all required information for a student's file is received, the student financial aid processing center begins an extensive and particular process of reviewing a student's file. Preliminary review establishes verification of required documents, and quality control assures that established criteria are met for each reviewed student. Once a file is completely reviewed, loans and other aid can then be certified. As such, there is a clear correlation between the service for comparing information and the subsequently recited service for determining authorized (e.g., certified) amounts of aid. The final service set forth in claim 11 – "a service for providing an award notice to the given student" – particularly describes that such award notice is based on the previous determination of authorized financial aid eligibility, thus correlating this last step to the previous.

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 adequately point out and distinctly claim the subject matter which applicant regards as his invention. The language itself in claim 11 provides enough information for one of ordinary skill in the art to understand the various integrated features of the claimed invention. When further viewed, as required by law, in light of the specification (as opposed to in a vacuum), one of ordinary skill in the art would understand not only the particulars of the claimed invention, but how such services may particularly be implemented, for example, with the processing steps illustrated in and described with reference to Figs. 4 – 7, respectively. The arguments above can be similarly applied to independent claim 60. As such, claims 11 and 60 particularly points out and distinctly claims the invention and thus satisfies all requirements of 35 U.S.C. § 112, second paragraph. For at least this reason, Applicant requests withdrawal of the pending rejection of claims 11 and 60 under 35 U.S.C. § 112, second paragraph.

## 35 U.S.C. §103(a) REJECTION (CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66):

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over "Financial Aid Prospecting – ONLINE: The Internet is Loaded with Valuable Financial Aid Information, but Few Campus Web Sites Are Designed to Help Them Find It," Terrell, Kenneth, Black Issues in Higher Education, Reston: Oct. 28, 1999, Vol. 16, Iss. 18, pg. 38 (hereinafter "Terrell") in view of U.S. Patent No. 7,062,462 (Ireland et al.) and further in view of U.S. Patent No. 5,870,721 (Norris) and further in view of Applicant's Admitted Prior Art (AAPA).

Nowhere has the USPTO's burden of establishing a prima facie case of unpatentability been more articulated than within the context of obviousness analysis under 35 U.S.C. § 103. The legal concept of prima facie obviousness is a procedural tool of examination that dictates who has the burden of producing evidence in each step of the examination process. The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness. See, e.g., *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ 294 (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some

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articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. 398, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

The reasoning set forth in the recent Office Action fails to establish a required prima facie case of obviousness. The cited references, singularly or in combination, fail to disclose many of the elements of independent claim 11. Key among such elements are the following web-based online and automated modular features which are important to the web-based application for providing a multi-level financial aid system featuring integrated and automated on-line financial aid features to a user, as set forth in claim 11. In particular, such references fail to disclose the following features: an automated online "federal link service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student," an automated online "service for comparing information obtained via said first information collection service and the given student's ISIR document," and an automated online "service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution." The above elements are also described in the combination of claims 60 and 61, which are also presently rejected.

#### **DEFICIENCIES OF TERRELL:**

Regarding claim 11, the Examiner has aptly acknowledged the many deficiencies of <u>Terrell</u> as a base reference. More particularly, as indicated on numbered pages 5 and 6 of the November 10, 2010 Office Action, "<u>Terrell</u> does not explicitly disclose [the following elements of claim 11:]

a financial aid estimation service for evaluating the information obtained via said first information collection service and generating a predicted amount of monetary aid that may be available for the student to use for education-related expenses at a given educational institution;

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receiving an electronic copy of an Institutional Student Information Report (ISIR) document for the given student;

a service for comparing information obtained via said first information collection service and the given student's ISIR document;

a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution; and

a service for providing an award notice to the given student based on the determination of authorized financial aid eligibility."

There are further deficiencies of <u>Terrell</u> as a base reference beyond those explicitly identified in the recent Office Action (listed above). <u>Terrell</u> does not even disclose the few limited aspects alleged on numbered page 5 of the recent Office Action. Such portion of the Office Action alleges that "<u>Terrell</u> discloses a first information collection service for obtaining requested personal and financial aid information about a given student [see NPL 7 pages], Internet FTP for transferring files, a federal link service (see web page link to <u>www.fafsa.ed.gov</u>) [sic]." Nowhere in the 7 pages printed out from an apparent Internet archive is there a discussion of any of these claimed features. <u>Terrell</u> does not specifically disclose any of the claimed features of claim 11 – nothing about the specifically recited information collection service, nothing about FTP file transfer, and nothing about a "federal link service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for the given student." The only thing accurate about the above statement regarding <u>Terrell</u> is that the Department of Education provides a link at <u>www.fafsa.gov</u> for students to complete their Federal Application for Financial Aid (FAFSA) online.

<u>Terrell</u> is a brief 1400 word article that makes vague mention of the fact that the Internet has valuable financial aid information online, and lists a plurality of websites where students can go to find information. Everyone knows that you can read information accessible on the Internet, just like one could read a book about a subject.

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Providing links to information is NOT the same as providing a functional web-based software application that has specific functionality and practical application, such as set forth in claims 11-13, 15, 17, 19-25, 56-57 and 59-66. There is NOTHING in <u>Terrell</u> that talks about providing a web-based application for providing a multi-level financial aid system featuring integrated and automated on-line financial aid features specific to a given educational institution to a user. In fact, <u>Terrell</u> is so devoid of disclosing any of the functional features set forth in the claims, Applicant is unclear of why it is even being applied as a base reference.

Because <u>Terrell</u> fails to disclose numerous features of claim 11, such reference cannot serve to render such claim unpatentable. Similar features from claim 11 are set forth in claims 60, 61 and others. As such, <u>Terrell</u> cannot serve to render such additional claims unpatentable. As detailed below, the other cited references fail to cure the many deficiencies of Terrell.

# **DEFICIENCIES OF IRELAND ET AL.:**

Claim 11 is generally directed to a comprehensive online system that includes features for the actual processing of financial aid applications. <u>Ireland et al.</u> merely provides an interface for viewing and analyzing <u>previously processed</u> award packages to a student. For instance, in col. 6, lines 20-34, <u>Ireland et al.</u> disclose how it is still the responsibility of a school administrator to generate a financial aid package and preferably mail a letter to a potential student containing an announcement of the financial aid package. The viewing of the package by a student or parent may then occur upon accessing a given URL address and supplying a user name and password.

Ireland et al. provides a plethora of features that may be utilized to view award packages, predict loan repayment amounts, etc. but <u>such reference still does not</u> disclose a method for the actual processing of such awards as set forth in claims 11, 60, 61 and others of the subject application. More specifically, processing features set forth in claims 11, 60 and 61 not sufficiently described in Ireland et al. include respective

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services for obtaining personal and financial information about a given student, receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student, comparing the student's personal and financial information with the ISIR information, and determining an <u>authorized</u> amount of financial aid the student is eligible for (as opposed to a separate previously estimated amount). Because <u>Ireland et al</u>. does not concern processing, it never addresses any of these same important features of claims 11, 60 and 61 that are also lacking in <u>Terrell</u>. DEFICIENCIES OF AAPA:

The recent Office Action further attempts to cure the deficiencies of <u>Terrell</u> (and <u>Ireland et al.</u>) with background information set forth in the subject application. More particularly, the Examiner alleges on numbered page 7 of the recent Office Action that "[Applicant's Admitted Prior Art (AAPA)] discloses evaluating the information received via said first information collection service; a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution.] This is an improper characterization of what is disclosed in the Background of the Invention section of the subject application, and Applicant respectfully submits that such disclosure clearly does NOT correspond to the elements set forth in claim 11.

The Background of the Invention section of the subject application generally describes the cumbersome manual interaction that often existed in a school's financial aid office before provision of the subject Virtual Financial Aid Office (VFAO) technology. Instead of prior arrangements described there, the entire system and process by which a student goes about obtaining financial aid is transformed by the subject VFAO technology. By providing an integrated on-line web-based application, a student is now capable of undergoing an online student interview process by which personal, demographic and financial information can be provided in a secure portal, using high bit-level encryption, protection from third-party intrusion and the like. Additional automated online tools and resources are also available, where they weren't before.

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For example, a student is provided with instant access to the platform (after completing an automated online PIN application) to provide additional updated information, and also to obtain a financial aid estimate (via the financial aid estimation service tool) before actual authorized aid packages are processed. Specific algorithms and rules engines are implemented via software to perform various processing steps including interview processing, file review, aid determination and quality control (see steps and discussion relative to Figures 4-7, respectively).

None of the above automated, computer-based features are discussed as admitted prior art in the subject application. In contrast, the various embodiments of the invention, not the prior art, are described in the subject application as including the features set forth in claim 11. In particular, three of the important steps in automated aid processing as set forth in claim 11 include: a service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student; a service for comparing information obtained via said first information collection service and the given student's ISIR document; and a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution. None of these are disclosed in the Background section, nor could any of these be part of a "web-based application" that provides "integrated and automated online financial aid features" to a user since the only financial aid interaction discussed in the Background involved a different sort of manual interaction among entities involved in the traditional financial aid process. As such, <u>AAPA</u> fails to cure the many deficiencies of <u>Terrell</u> and <u>Ireland et al.</u>

#### DEFICIENCIES OF NORRIS:

The recent Office Action further attempts to cure the deficiencies above with the disclosure in U.S. Patent No. 5,870,721 (Norris), in which loan approval technology is argued as analogous to the specific steps of claim 11. Norris fails to disclose all elements of claims 11, 60 and 61. Numbered page 8 of the June 12, 2008 Office Action

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asserts that "Norris discloses receiving an electronic copy of loan document or borrower (analogous to an Institutional Student Information Report (ISIR) document for the given student); a service for comparing information obtained via said first information collection service (database – analogous service) and the given borrowers loan application/document (analogous to student's ISIR document)." It seems apparent not only from the Norris patent itself, but even from the Examiner's characterization of such reference, that Norris doesn't have anything to do with receipt of student aid information and subsequent processing thereof.

In particular, claims 11 and 61 recite an automated on-line "federal link service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student." Norris doesn't once mention anything about applying its loan processing techniques to students, nor does it mention anything about ISIR documents, both of which are of particular importance to the automated processing in claims 11 and 61. Since Norris fails to disclose an automated service for receiving a student ISIR document, a feature that was not disclosed in Terrell, nor Ireland et al., nor in AAPA, this feature of claims 11 and 61 is still not disclosed in the cited art. A prima facie case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited art discloses a federal link service for receiving an electronic copy of an ISIR for a given student.

In addition, claims 11 and 61 recite "a service for comparing information obtained via said first information collection service and the given student's ISIR document." None of the cited references discloses receiving a student ISIR document, so none of the cited references are capable of disclosing information contained in such an electronic document. Norris doesn't relate to student aid, nor does it disclose information on an ISIR document, so Norris again fails to cure this particular deficiency of Terrell, Ireland et al. and AAPA relative to claims 11 and 61. A prima facie case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited

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references discloses an automated service for comparing information obtained via said first information collection service and the given student's ISIR document.

Still further, claims 11 and 60 recite a "service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution." As discussed above, neither <u>Terrell</u> nor <u>Ireland et al.</u> discloses this feature. Norris fails to cure this deficiency for many clear reasons. Norris does not analyze student aid, and gives no apparent consideration to the requirements for "authorization" that uniquely apply to student aid as opposed to general loans for other reasons. As indicated in claims 11 and 60, eligibility is tied to a given educational institution. Since Norris doesn't involve students or student financial aid, Norris does not disclose and has no reason to consider the special factors required to analyze institution-specific eligibility for student funds – including but not limited to cost of tuition, books, living expenses, full-time vs. part-time student status, verification of student enrollment, availability of scholarships, grants and other NON-LOAN financial aid, etc. Norris does not disclose determining an authorized amount of student financial aid for a student because none of the student-specific analytical requirements are analyzed in Norris. Norris does not disclose determination of eligible student aid for a given educational institution because Norris doesn't consider specific schools or information related to a school sufficient to determine what a student may or may not be "eligible" for at a specific institution. A prima facie case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited art, including Norris, discloses a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution.

#### CONCLUSION:

The combination of <u>Terrell</u>, <u>Ireland et al.</u>, <u>AAPA</u> and <u>Norris</u> fails to provide a prima facie case of obviousness under 35 U.S.C. § 103(a). All references fail to disclose at least the following elements of claims 11, 60 and 61: a federal link service

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for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for the given student; a service for comparing information obtained via said first information collection service and the given student's ISIR document; and a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution. As such, Applicant respectfully requests withdrawal of the obviousness rejection of independent claims 11 and 60 as well as dependent claim 61.

With regard to claims 12-13, 15, 17, 19-25, 56, 57 and 59, such claims depend from otherwise allowable claim 11 and further limit such independent claim. Similarly, claims 61-66 depend from otherwise allowable claim 60 and further limit such independent claim. If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. In re Fine, 387 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1998), emphasis added. Since claims 11 and 60 should be allowed over the cited art, so should claims 12-13, 15, 17, 19-25, 56, 57, 59 and 61-66. Applicant respectfully requests acknowledgement of allowance.

#### ADDITIONAL EVIDENCE OF NON-OBVIOUSNESS:

Applicant believes that the above arguments provide a clear basis for explaining how the cited references fail to disclose all elements set forth in the presently pending claims, which should be enough in and of itself to successfully traverse the present rejection under 35 U.S.C. § 103(a). As even further support to rebut such obviousness allegations, specific objective evidence of non-obviousness was previously presented in the form of commercial success of the invention. Such evidence <u>must</u> be considered by the Examiner in any determination of patentability.

The U.S. Supreme Court case of *KSR International Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 82 USPQ 2d 1382 (2007) affirmed that objective evidence relevant to the issue of obviousness <u>must</u> be evaluated by Office personnel. Such objective evidence,

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referred to as "secondary considerations," was identified in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966) as including evidence of commercial success, longfelt but unsolved needs, failure of others, and unexpected results. The Court of Appeals for the Federal Circuit stated in *Stratoflex, Inc. v. Aeroequip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) that "evidence rising out of the so-called 'secondary considerations' <u>must always when present be considered</u> en route to a determination of obviousness" (emphasis added). (See also MPEP §716.01(a).)

Not only does the cited prior art fail to disclose all elements set forth in the subject claims, but it would not be obvious to combine these references in rendering the presently claimed invention unpatentable. Particular evidence of this non-obviousness was previously submitted in the form of a declaration by sole inventor Harry V. Weber, who is President of Weber & Associates, Inc., the assignee of the subject application. Such objective evidence identifies commercial success of the subject technology as a pertinent secondary consideration relevant to any current determination of obviousness of the present claims.

The previously submitted declaration is provided under 37 C.F.R. §1.132 as objective evidence of commercial success of a technology offered by Weber & Associates Inc. referred to as their Virtual Financial Aid Office (VFAO) technology. The web-based application for providing a multi-level financial aid system disclosed in the subject application and set forth in the presently pending claims is generally synonymous with the commercial embodiments of Weber & Associates' VFAO technology currently provided and with commercial embodiments provided to its customers since July 1, 2001. Since its complete inception in mid-2001, Weber & Associates has offered its VFAO technology for sale to institutions of higher education, including colleges and universities throughout the country. During the time period from mid-2001 until the declaration date, over thirty-five (35) different colleges and universities have purchased and used the VFAO technology provided by Weber &

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Associates, Inc. and have implemented it for use in over eighty (80) different locations in various states throughout the nation. This commercially successful product has generated over \$16.5 million dollars in sales for Weber & Associates from July 1, 2001 until the declaration date. The commercial success of the VFAO technology, synonymous with that described by the present claims, is deniably astounding and should thus be given substantial consideration in finding the present claims non-obvious.

The commercial success of the subject technology has not only been realized by the assignee, but also for the educational institutions who have implemented the subject technology. Several of such institutions provide online degree programs and so having an integrated on-line web-based application for providing financial aid services to their students has been critical to their continued ability to function in today's competitive world of higher education. Multiple such institutions have doubled their total number of students during the time period in which VFAO technologies were provided to such institutions, and have thus recognized the value of the VFAO technology to their growth.

Applicant respectfully submits that the subject web-based application for providing integrated on-line financial aid features, as set forth in present claims 11-13, 15, 17, 19-25, 56-57, 59 and 60-66, is not obvious in light of the presently submitted objective evidence of the remarkable commercial success of Applicant's virtual financial aid office technology. The entire record, including this proof of commercial success, coupled with the deficiencies of the cited references, overwhelmingly weighs in favor of patentability of the subject claims under 35 U.S.C. § 103. If the Examiner cannot provide specific factual support explaining why such is not the case, then a prima facie case of obviousness is not proper. As such, Applicant requests withdrawal of the pending rejection under 35 U.S.C. § 103.

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#### **CONCLUSION:**

Inasmuch as all outstanding issues have been addressed, Applicant respectfully submits that the present application, including claims 11-13, 15, 17, 19-25, 56-57 and 59-66, is in complete condition for issuance of a formal Notice of Allowance, and action to such effect is earnestly solicited. Applicant invites the Examiner to telephone the undersigned at his convenience should only minor issues remain after consideration of this response in order to permit early resolution of the same.

Respectfully submitted,

DORITY & MANNING, ATTORNEYS AT LAW, P.A.

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